

Pollution Prevention Fact Sheet

Oil Filters

Utah Department of Environmental Quality

Promoting a Healthy Environment

Used oil filters are recyclable because they are made of steel, North America's number one recycled material. They are being recycled today into new steel products, such as cans, cars, appliances and construction materials. Recycling all the filters sold annually in the United States would result in the recovery of about 160,000 tons of steel, or enough steel to make 16 new stadiums the size of Atlanta's Olympic Stadium.

The Problem with Improper Disposal

Improper disposal of oil and oil filters can contaminate soil, surface water, and drinking water. Before it is drained, an oil filter can contain 2 to 13 ounces of used oil. If 90 percent of the hot-drained filters from do-it-yourselfers (DIYers) are land filled, from 2.5 million to 10 million gallons of used oil are also landfilled.

Hazardous or Non-hazardous?

The disposal of used oil filters is specifically addressed under **R315-15-1.6** in Utah's, "**Standards For The Management of Used Oil**"(**R315-15**). Used oil filters are also discussed under **R315-2-4(b)(14)** of the "Hazardous Waste Management Rules", which excludes certain types of oil filters from the definition of a hazardous waste, thereby allowing generators to manage them as non- hazardous waste. Used oil filters may be excluded from hazardous waste regulations provided three criteria are met:

- C The filters must be non-terne plated. Terne is a tin/lead alloy historically used to cover the interior of oil filters. The lead content of the plating material may cause the filters to exhibit a hazardous waste characteristic.
- C The filters must not be mixed with hazardous waste since mixtures of solid waste and hazardous waste are regulated as hazardous waste.
- C The filters must be gravity hot drained. R315-2-4(b)(14), Utah Administrative Code, specifies used oil filters must be hot drained using one of the following methods:
 - 1. Puncturing the anti-drainback valve or dome;
 - 2. Crushing;
 - 3. Dismantling; or
 - 4. Using any other equivalent method that will remove oil from the filter.

The Environmental Protection Agency (EPA) clarified gravity hot draining (57 FR 215214) as draining the oil filter near engine operating temperature and above room temperature for a

minimum hot drain time of 12 hours. If an oil filter is picked up by hand or lifted by machinery and used oil immediately drips or runs from the filter, the filter should **not** be considered drained.

Warning: Use caution when hot-draining filters to avoid being burned. Protective equipment such as safety glasses and gloves should be worn to prevent injury.

Procedures for properly draining oil filters

- C If necessary, use a filter wrench to loosen the old oil filter. Carefully remove it without spilling oil.
- C Puncture a hole in the dome of the filter or through the antidrain back valve with a suitable tool, such as a screwdriver. (This breaks the vacuum and allows the trapped oil to drain out of the filter).
- C Turn the filter upside down in a used oil collection container, such as a drip pan. Drain as much oil as possible from the filter. For best results, drain used oil filters for a minimum of 12 hours at an approximate temperature of 72 degrees F. or higher.
- C Use a funnel or carefully pour the used oil from the drip pan into a clean container appropriate for recycling the oil.
- C If the oil filter cannot be recycled, due to a lack of available filter recycling sites, seal it in a plastic zipper bag, coffee can with lid or other leak-proof container and place in the trash.

To Help Prevent Pollution

- C Perform oil changes only when necessary to minimize the quantity of oil filters generated.
- C Encourage the use of longer lasting synthetic oils to decrease frequency of oil changes.
- C Crush filters to remove as much oil as possible before landfilling them.
- C Consider using reusable filters or by-pass filters.
- C Recycle used filters if at all possible.

Some large trucking firms, auto dealerships, and chain service centers in Utah, have contracts for disposal and recycling of spent oil filters. However, for the typical do-it-yourselfer, finding a drop off place for used filters that won't end up in a landfill is difficult or impossible. Many states including Utah simply do not yet have the infrastructure available to handle the DIY'er used oil filters.

For More Information, Contact:

Department of Environmental Quality (801) 536-4400.
Division of Solid and Hazardous Waste (801) 538-6170.
Pollution Prevention Coordinator (801) 536-4477.

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